Claim 28, line 2 (Amended): Replace "any one of claims 21to 27" with --claim 21--.

Please add the following new claims:

-- 29. A method comprising the following successive steps:

1) providing at least one bifunctional alkenyloxyaryl or alkenylaryloxyaryl compound of the formula $[R\text{-}CH{=}CH\text{-}(X)\text{-}O]_n\text{-}Ar\text{-}Q$, where Q is a group which reacts with a hydrogen carried by a heteroatom selected from the group consisting of oxygen, nitrogen and sulphur or a precursor thereof, and where:

n is in the range 1 to 20;

R is hydrogen or a linear of branched alkyl group or a linear or branched alkoxy group or a hydroxyl or an optionally substituted aryl group,

X is a divalent linear alkyl group containing more than one carbon atom, or a branched divalent alkyl group, or an aryl group optionally substituted with at least one group selected from the group consisting of hydrogen, alkyl, alkoxy, hydroxyl and trihalogenoalkyl;

Ar is an aryl or polyaryl group, optionally substituted with at least one hydrogen atom or at least one group selected from the group consisting of alkyl, alkoxy, hydroxyl, trihalogenoalkyl, silyl, thiol, amino, aminoalkyl, amide, nitro, nitrosamino, N-amino, aldehyde, acid, and ester; and

2) reacting at least one chiral compound containing at least one hydrogen of an alcohol, amine or thiol function with at least one group Q of the bifunctional compound of step 1), to synthesize at least one chiral compound.

30. A process according to claim 24, wherein said bifunctional compound is other than 4-allyloxyaniline, 4-allyoxybenzoic acid, an acid chloride of 4-allyoxybenzoic acid, and 4-allyoxyphenylisocyanate.

31. A process according to claim 10, wherein said bifunctional compound is other than 4-allyloxyaniline, 4-allyoxybenzoic acid, an acid chloride of 4-allyoxybenzoic acid, and 4-allyoxyphenylisocyanate.

32. A method comprising the following successive steps:

1) providing at least one bifunctional alkenyloxyaryl or alkenylaryloxyaryl compound with general formula $[R\text{-}CH{=}CH\text{-}(X)\text{-}O]_n\text{-}Ar\text{-}Q$,

where Q is -N=C=O or a precursor thereof; $-NH_2$ or $-CON_3$; -COCl or its precursor; -COOH; -N=C=S; or $-CH_2Y$, where Y is Cl or Br or I or methylsulphonyloxy or para-toluenesulphonyloxy or 3,5-dimethylphenylsulphonyloxy and where:

- n is in the range 1 to 20;
- R is hydrogen or a linear or branched alkyl group or a linear or branched alkoxy group or hydroxyl or an aryl group, optionally substituted;
- X is a linear alkyl group carrying more than one carbon atom or a branched alkyl group, or an aryl group, optionally substituted with at least one group selected from the group consisting of hydrogen, alkyl, alkoxy, hydroxyl and trihalogenoalkyl groups; and
- Ar is an aryl or polyaryl group, optionally substituted with at least one hydrogen atom or with at least one group selected from the group consisting of alkyl, alkoxy, hydroxyl, trihalogenoalkyl, silyl, thiol, amino, aminoalkyl, amide, nitro, nitrosamino, N-amino, aldehyde, acid and ester groups,
- excluding the following compounds: 4-allyloxyaniline, 4-allyloxybenzoic acid, its acid chloride, and 4-allyloxyphenylisocyanate

2) reacting at least one chiral unit containing at least one hydrogen of an alcohol, amine or thiol function with at least one group Q of the bifunctional compound of step 1), to synthesise at least one chiral compound.

33. A process for synthesising polymers comprising the following successive steps:

1) providing at least one bifunctional alkenyloxyaryl or alkenylaryloxyaryl type compound with general formula $[R\text{-}CH{=}CH\text{-}(X)\text{-}O]_n\text{-}Ar\text{-}Q$,

where Q is -N=C=O or a precursor thereof; $-NH_2$ or $-CON_3$; -COCl or its precursor; -COOH; -N=C=S; or $-CH_2Y$, where Y is Cl or Br or I or methylsulphonyloxy or para-toluenesulphonyloxy or 3,5-dimethylphenylsulphonyloxy and where:

- n is in the range 1 to 20;
- R is hydrogen or a linear or branched alkyl group or a linear or branched alkoxy group or hydroxyl or an aryl group, optionally substituted;
- X is a linear alkyl group carrying more than one carbon atom or a branched alkyl group, or an aryl group, optionally substituted with at least one group selected from the group consisting of hydrogen, alkyl, alkoxy, hydroxyl and trihalogenoalkyl groups; and
- Ar is an aryl or polyaryl group, optionally substituted with at least one hydrogen atom or with at least one group selected from the group consisting of alkyl, alkoxy, hydroxyl, trihalogenoalkyl, silyl, thiol, amino, aminoalkyl, amide, nitro, nitrosamino, N-amino, aldehyde, acid and ester groups,
- excluding the following compounds: 4-allyloxyaniline, 4-allyloxybenzoic acid, its acid chloride, and 4-allyloxyphenylisocyanate

2) conducting polymerization by the alkenyl moiety or by the R group of the bifunctional compound of step 1), to synthesize at least one polymer functionalized by a group Q.

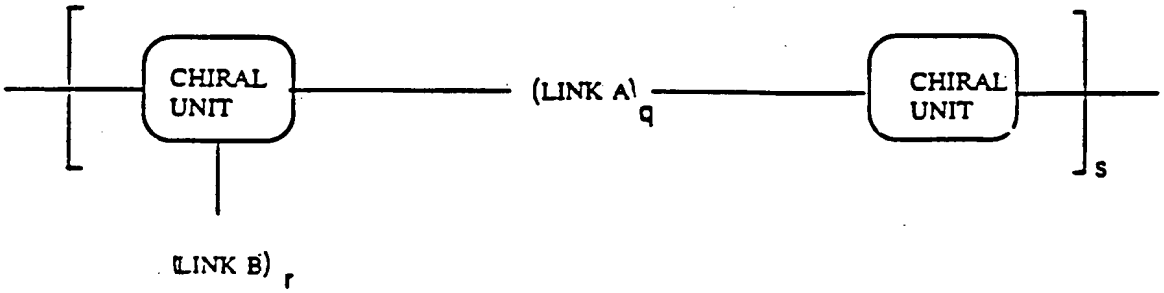
34. A process comprising polymerizing and cross-linking a chiral compound by reacting at least one hydrogen of an alcohol, amine or thiol function of at least one chiral unit of a product with at least one group Q of the bifunctional compound with the general formula $[R\text{-}CH{=}CH\text{-}(X)\text{-}O]_n\text{-}Ar\text{-}Q$,

where Q is a group which is reactive towards a hydrogen carried by a heteroatom selected from the group of oxygen, nitrogen or sulphur, or a precursor of such a group, and where:

- n is in the range 1 to 20;

- R is hydrogen or a linear or branched alkyl group or a linear or branched alkoxy group or hydroxyl or an aryl group, optionally substituted;
- X is a linear alkyl group carrying more than one carbon atom or a branched alkyl group, or an aryl group, optionally substituted with at least one group selected from the group of hydrogen, alkyl, alkoxy, hydroxyl or trihalogenoalkyl groups; and
- Ar is an aryl or polyaryl group, optionally substituted with at least one hydrogen atom or with at least one group selected from the group of alkyl, alkoxy, hydroxyl, trihalogenoalkyl, silyl, thiol, amino, amino, aminoalkyl, amide, nitro, nitrosamino, N-amino, aldehyde acid or ester groups

excluding the following compounds: 4-allyloxyaniline, 4-allyloxybenzoic acid, its acid chloride, and 4-allyloxyphenylisocyanate or its ester, amide, urea, carbamate, thioester or thiocarbamate derivatives with general formula (I):

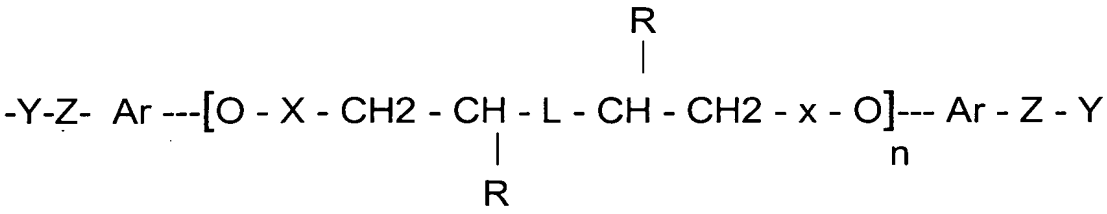


where:

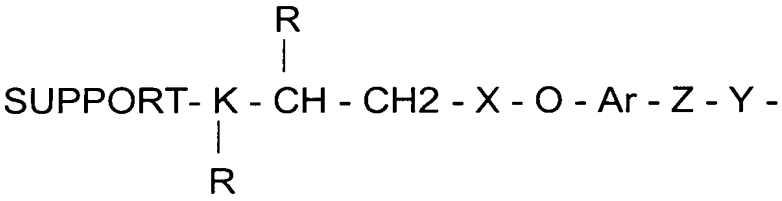
- q is at least 1 and less than 20;
- s is at least 1 and less than 20000;
- if r = 0, the compound is a pure cross-linked chiral polymer, oligomer or monomer;
- if r ≥ 1, the compound is a chiral polymer, oligomer or monomer which is cross-linked in a three-dimensional network andbonded to a cross-linked support;

LINK A represents:

R



Link B represents:



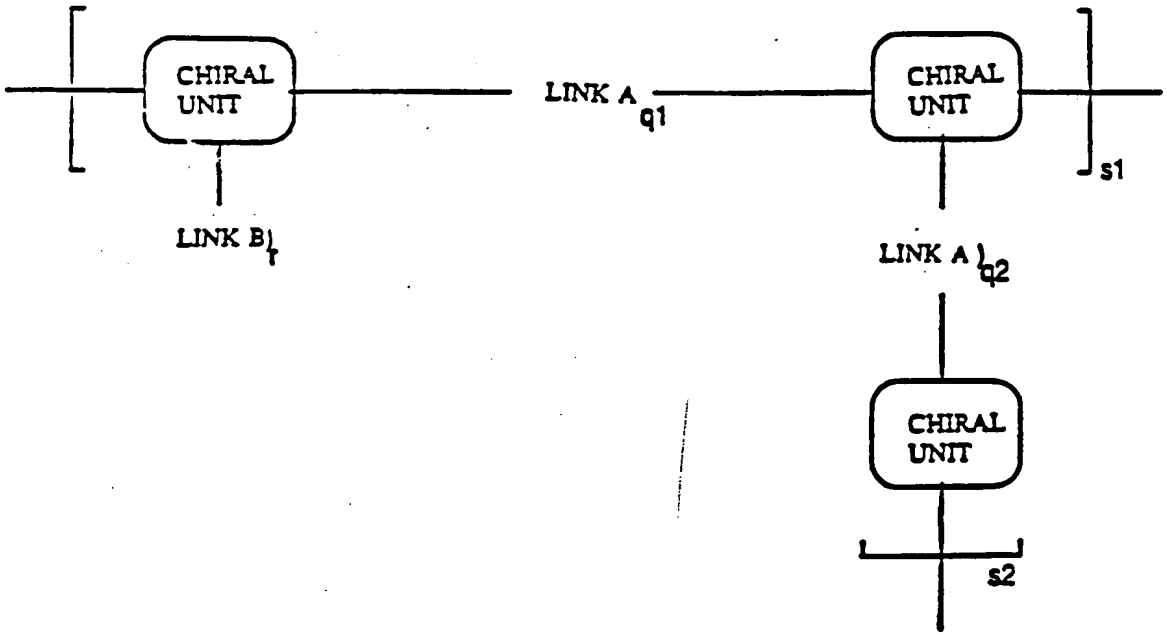
- "chiral unit" represents a monomeric, oligomeric, cyclooligomeric or polymeric chiral compound and optionally comprises a primary or secondary amine function or a primary, secondary or tertiary hydroxyl function or a sulphhydryl function and in which all or a portion of these functions have optionally been modified to the ester, amide, urea, carbamate, thioester or thiocarbamate;
- Z represents a $-CH_2-$ group or a -CO- group or a -NH-CO- group or a -NH-CS- group;
- Y represents a sulphur or oxygen atom or the amino group;
- n is in the range 1 to 20;
- Ar represents an aryl or polyaryl group
- X represents an alkyl or aryl group;
- R represents an alkyl group or hydrogen;
- L represents a single bond or a bis-sulphhydrayl or a silane or an ethylene group which may be substituted or a disiloxane;
- K represents a single bond or a siloxane or a silane;
- "support" represents an organic or mineral support; functionalized by an alkene or a hydrogenosilane or a sulphhydryl.

35. A process for polymerizing and cross-linking a chiral compound by reacting at least one hydrogen of an alcohol, amine or thiol function of at least one chiral unit of a product with at least one group Q of the bifunctional compound with the general formula $[R-CH=CH-(X)-O]_n-Ar-Q$,

where Q is a group which is reactive towards a hydrogen carried by a heteroatom selected from the group of oxygen, nitrogen or sulphur, or a precursor of such a group, and where

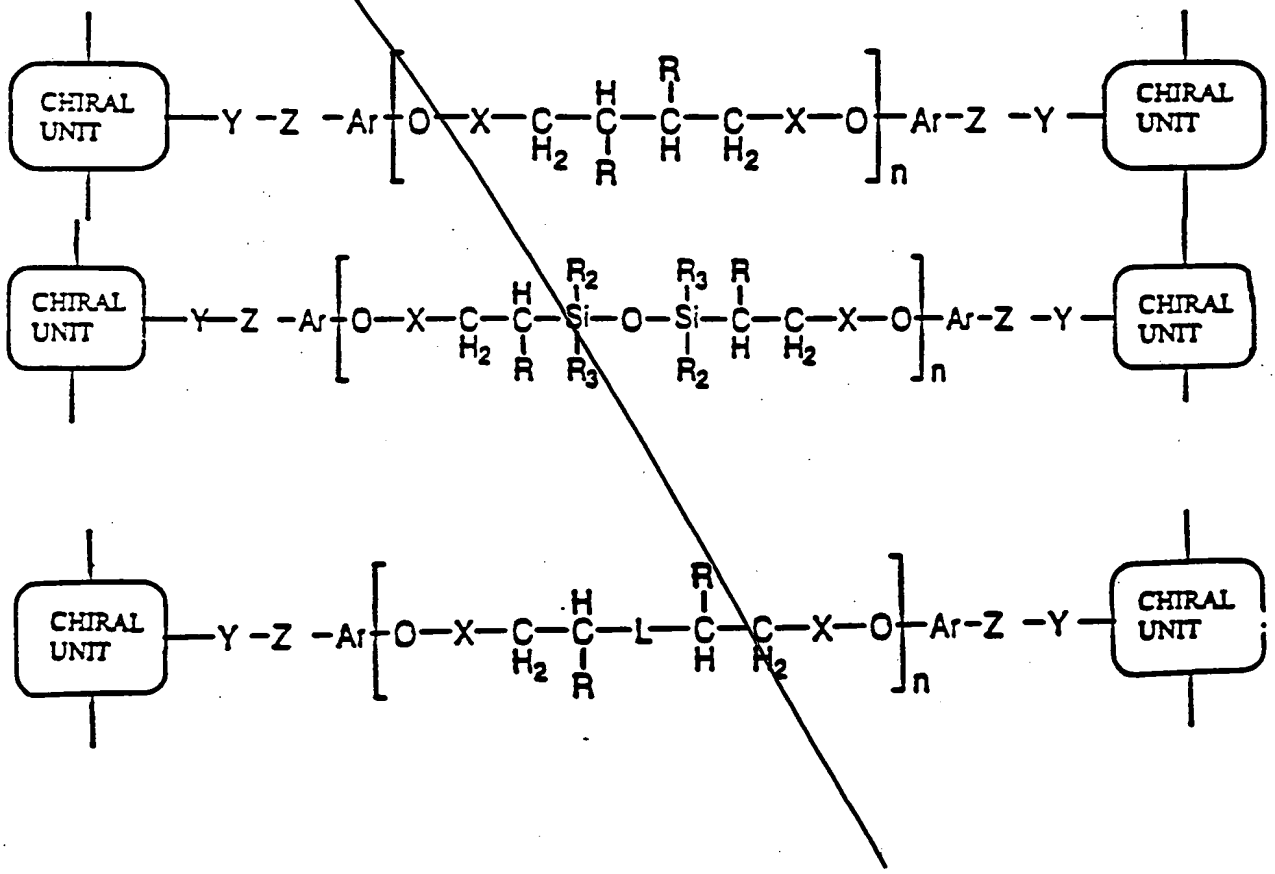
- n is in the range 1 to 20;
- R is hydrogen or a linear or branched alkyl group or a linear or branched alkoxy group or hydroxyl or an aryl group, optionally substituted;
- X is a linear alkyl group carrying more than one carbon atom or a branched alkyl group, or an aryl group, optionally substituted with at least one group selected from the group of hydrogen, alkyl, alkoxy, hydroxyl or trihalogenoalkyl groups; and
- Ar is an aryl or polyaryl group, optionally substituted with at least one hydrogen atom or with at least one group selected from the group of alkyl, alkoxy, hydroxyl, trihalogenoalkyl, silyl, thiol, amino, amino, aminoalkyl, amide, nitro, nitrosamino, N-amino, aldehyde acid or ester groups

excluding the following compounds: 4-allyloxyaniline, 4-allyloxybenzoic acid, its acid chloride, and 4-allyloxyphenylisocyanate or its ester, amide, urea, carbamate, thioester or thiocarbamate derivatives, with general formula:



- n is in the range 1 to 20;
- Ar represents an aryl or polyaryl group
- X represents an alkyl or aryl group;
- R represents an alkyl group or hydrogen;
- L represents a single bond or a bis-sulphhydrayl or a silane or an ethylene group which may be substituted or a disiloxane;
- K represents a single bond or a siloxane or a silane; and
- "support" represents an organic or mineral support; functionalized by an alkene or a hydrogenosilane or a sulphhydryl.

36. A process according to claim 18 wherein said polymerized and cross-linked chiral compounds has the following formulae:



37. A method according to claim 32, wherein the bifunctional compound is parapent-4-enoxybenoic acid.

38. A process according to claim 33, wherein the bifunctional compound is parapent-4-enoxybenoic acid.

39. A process according to claim 34, wherein the bifunctional compound is parapent-4-enoxybenoic acid.

40. A process according to claim 35, wherein the bifunctional compound is parapent-4-enoxybenoic acid.

41. A process according to claim 36, wherein the bifunctional compound is parapent-4-enoxybenoic acid.

42. A method according to claim 1, wherein the bifunctional compound is parapent-4-enoxybenoic acid.

43. A method according to claim 3, wherein the bifunctional compound is parapent-4-enoxybenoic acid.

44. A method according to claim 5, wherein the bifunctional compound is parapent-4-enoxybenoic acid.

45. A chiral compound according to claim 18, wherein the bifunctional compound is parapent-4-enoxybenoic acid.

46. A chiral compound according to claim 19, wherein the bifunctional compound is parapent-4-enoxybenoic acid.

47. A chiral support used to claim 21, wherein the bifunctional compound is parapent-4-enoxybenoic acid.

48. A process according to claim 28, wherein the bifunctional compound is parapent-4-enoxybenoic acid.--